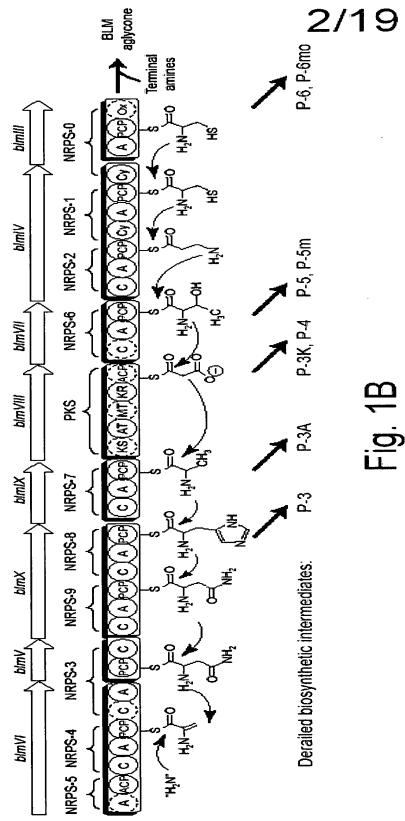
### **BLEOMYCIN GENE CLUSTER COMPONENTS** AND THEIR USES Ben Shen et al. MAR 1 5 2004 Serial No: 09/477,962 E THADES Atty Docket NO: 407T-895820US BLM B2, R1 = HN. R<sup>2</sup> = 웊 D-Mannose + L-Gluose BLM aglycone, R<sup>2</sup> = OH, R<sup>3</sup> = terminal amines

# MAR 15 2004 PER TO THE PERSON OF THE PERSON

#### BLEOMYCIN GENE CLUSTER COMPONENTS AND THEIR USES

Ben Shen *et al.* Serial No: 09/477,962 Atty Docket NO: 407T-895820US

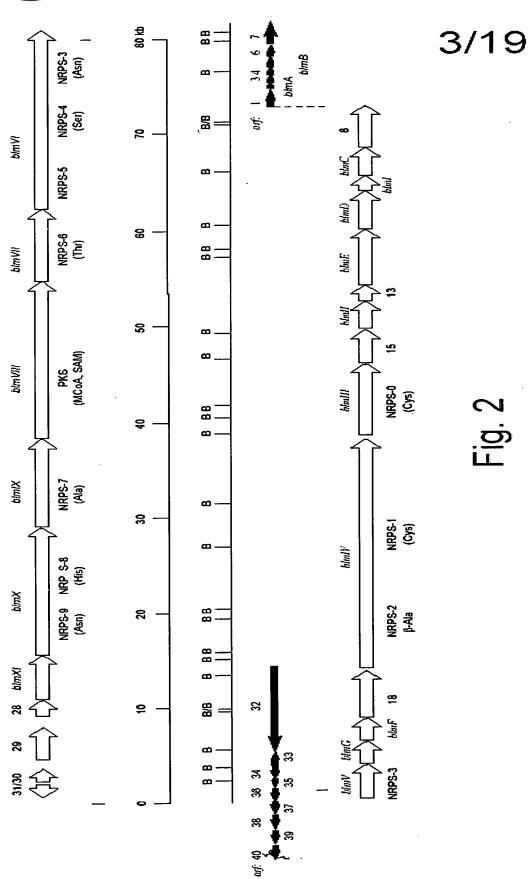


## MAR 15 2004 P.

#### BLEOMYCIN GENE CLUSTER COMPONENTS

AND THEIR USES

Ben Shen *et al.* Serial No: 09/477,962 Atty Docket NO: 407T-895820US



# MAR 1 5 2004 2 3

#### BLEOMYCIN GENE CLUSTER COMPONENTS AND THEIR USES

Ben Shen *et al.* Serial No: 09/477,962 Atty Docket NO: 407T-895820US

7/19 -종 아 BlmVII BlmVIII



#### BLEOMYCIN GENE CLUSTER COMPONENTS AND THEIR USES

Ben Shen *et al.* Serial No: 09/477,962 Atty Docket NO: 407T-895820US

### 9/19



#### BLEOMYCIN GENE CLUSTER COMPONENTS AND THEIR USES

Ben Shen *et al.* Serial No: 09/477,962 Atty Docket NO: 407T-895820US

### 10/19



#### BLEOMYCIN GENE CLUSTER COMPONENTS AND THEIR USES

Ben Shen *et al.* Serial No: 09/477,962 Atty Docket NO: 407T-895820US

#### 14/19

-18 RBS CC GGACGG CGGCCCGCTC

### Fig. 8C

| Grs-2  | 3045-ISIGTEYVAPRTMLEGKLEEIWKDWLGLQRWSIEDDFFTIGGESL-3089   |
|--|---|
| Srfa-3   | 960-DQLAEEWIGPPNEMEETIAQIWSEWLGRKQIGIHDDFFALGGESL-1004  |
| Vir-S  | 557-GRSVEGRGVPFTPQQEILASLFAEWLGLSKWJIHEDFFDLGGESL-601   |
| Saf-B  | 1661-LDPGQDYLAPRNELEARIAAIWEGLIRRERWJVHDSFFDLGGNGL-1705   |
| BlmI   | 1-MSAPRGERTRRRALERDIAAIWAETLGRDSWJPHEDFAALGGNGI-45  |
| consensus  | 1-i g eyvapR le ia iw evLgr rvGiHddFf lGGhSl-45   |
| Grs-2<br>Srfa-3<br>Vir-S<br>Saf-B<br>BlmI<br>consensus | 3090-K-MAVISQVHKECQTEVPLRVLEFTETIQGLAKYIEETDTEQYMA-3134 1005-K-MTAVPH.QQELGIDLPVKLLEFARTIAGISAYLKNGGSDGLQD-1048 602-L-TRLTSRIRTVLGAEIAVRDLEFARTVEALAETLEEAREVRPAL- 646 1706-L-TRLATRLAATLQVQAGVRTVEFHRTVAAQAAHFTQATKTHQAH-1750 46-H-IKITNRVEELVDAELSIRVLLETRIVAGMTDHVHATLTGERDR- 90 46-kAmrv srv l ev vrvlfE pTvagla i g t - 90 |

Fig. 9